

REMARKS

The Examiner, Mr. Dudek, is thanked for the courtesy extended applicants attorney during the telephone discussion subsequent to receipt of the Office Action of June 30, 2006, wherein the Examiner indicated that the Office Action dated June 30, 2006 supercedes the Office Action dated May 12, 2006. Applicants note that at page 2 of the Office Action dated June 30, 2006, it is indicated that "The previous Office Action is withdrawn and this Office Action is sent to replace that action. As the previous Office Action was a final Office Action, this action is made final in its place." Applicants note that an Office Action dated November 16, 2005 was issued, and on February 9, 2006, an interview was conducted with Examiners Parker and Chien. As a result of such interview, and due to change in Examiners, an Office Action was apparently issued on May 12, 2006, and subsequently, the Office Action of June 30, 2006 was issued, and the present amendment is considered to be responsive to the last Office Action dated June 30, 2006.

During the telephone discussion with the Examiner, Mr. Dudek, applicants requested clarification of the rejection of the claims under 35 USC 112, second paragraph, regarding the indication that the language "when a drive voltage is applied thereto so as to vary from a dark state to a light state" or "when a drive voltage is applied thereto so as to vary in the range of a minimum voltage required for a visual display on said liquid crystal panel to a maximum voltage" is unclear. The Examiner indicated that it is not apparent that intermediate or all voltages of the drive voltage from the dark state to the light state or from the minimum voltage to the maximum voltage are encompassed. The undersigned attorney, in light of such clarification, suggested amendment of the claims to recite "so as to vary at all voltages of the drive voltage" in the range of a minimum voltage required for a visual

display on said liquid crystal panel to a maximum voltage or from a dark state to a light state, and the Examiner indicated that such language would appear to overcome the indefiniteness noted. Applicants note that Fig. 32 of the drawings of this application, for example, illustrates the application of the drive voltage or applied voltage over the range indicated based upon an active matrix type liquid crystal panel having the characteristics of spectral transmittance, as recited in the claims of this application. Thus, by the present amendment, the independent claims of this application have been amended to utilize language "so as to vary at all voltages of the drive voltage" and all claims should be considered to be in compliance with 35 USC 112, second paragraph.

Also, by the present amendment, an informality in the specification has been corrected, based upon the original specification in the parent application. Additionally, the claims have been amended to correct informalities and provide antecedent basis for "said light source".

Applicants note that the indication that claims 6, 10, 14, 18, 25, 29 and 34 are objected to and would be allowable if written in independent form, as acknowledged. However, such claims have been retained in dependent form at this time.

The rejection of claims 11 - 13 under 35 USC 103(a) as being unpatentable over Bahadur; the rejection of claims 26 - 28, 30 - 33, 3 - 5, 7 - 9, 15 - 17, 21 - 24 under 35 USC 103(a) as being unpatentable over Bahadur and further in view of Matsumoto; such rejection is traversed insofar as they are applicable to the present claims and reconsideration and withdrawal of the rejection are respectfully requested.

As to the requirements to support a rejection under 35 USC 103, reference is made to the decision of In re Fine, 5 USPQ 2d 1596 (Fed. Cir. 1988), wherein the

court pointed out that the PTO has the burden under '103 to establish a prima facie case of obviousness and can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references. As noted by the court, whether a particular combination might be "obvious to try" is not a legitimate test of patentability and obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. As further noted by the court, one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.

Applicants note that submitted herewith is a Declaration Under 37 CFR 1.132 by Yasushi Tomioka setting forth the impropriety of the rejections, as discussed below.

Turning to the rejection of claims 11 - 13 under 35 USC 103(a) as being unpatentable over Bahadur, irrespective of the position set forth by the Examiner, applicants submit that independent claim 11, from which dependent claims 12 and 13 depend, recites the feature "wherein said liquid crystal panel is an active matrix type liquid crystal panel enabling display in a double refraction mode" and having characteristics as defined when a drive voltage is applied thereto so as to vary at all voltages of the drive voltage, in the manner defined. Applicants submit that Bahadur does not disclose or teach "an active matrix type liquid crystal panel", (emphasis added), as recited in claim 11 and the dependent claims thereof. While the Examiner refers to Fig. 10.34 at page 266 of Bahadur, as pointed out by the Examiner, the properties of a cell "(D-STN which a birefringent mode)" (emphasis

added) is described. As recognized by the Examiner, this portion of Bahadur describes a "STN" type of liquid crystal panel, and applicants submit that, and as recognized by the Examiner in the telephone discussion, a "STN" type of liquid crystal panel is a passive type, and not an active matrix type liquid crystal panel, as recited in independent claim 11 and the dependent claims of this application. Thus, irrespective of the Examiner's contentions concerning spectral transmittance characteristics as recited in claim 11 and the dependent claims, applicants submit that Bahadur does not disclose or teach in the sense of 35 USC 103 an "active matrix type" liquid crystal panel such that claim 11 and the dependent claims patentably distinguish thereover and should be considered allowable at this time, noting that Bahadur does not disclose or teach the characteristic of spectral transmittance, as recited when a drive voltage is applied thereto so as to vary at all voltages of the drive voltage in the range of a minimum voltage required for a visual display on said liquid crystal panel to a maximum voltage.

As to the combination of Bahadur with Matsumoto, as pointed out above, the liquid crystal panel shown in Bahadur is a STN type, which is a passive type and not an active matrix type, as claimed. As pointed out at page 5 of the Office Action, in referring to Bahadur, the Examiner states "However also not shown is the liquid crystal panel is an active matrix type liquid crystal panel" (emphasis added).

However, the Examiner contends that Matsumoto at page 70 discloses active matrix technique and concludes, "Therefore, one of ordinary skill would have found reason, motivation and suggestion to modify the device of Bahadur to employ an active matrix type driving matrix for the benefit discussed above." (emphasis added).

Applicants submit that the Examiner has engaged in a hindsight reconstruction attempt, utilizing the principle of "obvious to try", which is not the standard of 35 USC

103. See In re Fine, supra. More particularly, reference is made to the attached Declaration which states that:

"An STN layer used in a STN type display is different from a liquid crystal layer used in an active matrix type liquid crystal display."

As indicated in the Declaration, for example, an STN layer is very responsive to drive voltages. This characteristic is shown in Fig. 10.33 of Bahadur at page 265, wherein it is illustrated that the transmitted luminance of the STN layer is changed sharply. As indicated, a minimum transmittance with an applied voltage of 1.6 is changed to a maximum transmittance with an applied voltage of 1.8 which represents a minimum-maximum change of transmittance being performed in m-voltage order (in Fig. 10.33 on the order of 200 mV). Further, in an active matrix type display, it is not possible to control voltages in a mV order, because each TFT characteristic is not completely the same. Thus, if an STN layer, as shown in Bahadur, is applied to an active matrix type display, as shown in Matsumoto, it is not possible to control intermediate voltages and display intermediate brightness levels. Therefore, it is not practical to attempt to modify the device of Bahadur to employ an active matrix type, as disclosed in Matsumoto. Alternatively, if the device of Bahadur is modified to employ an active matrix type, the transmission spectra of the STN layer, which is shown in Fig. 10.34 of Bahadur, must be changed. Thus, not only would one of ordinary skill in the art not have found reason, motivation and suggestion to modify the device of Bahadur to employ an active matrix type driving matrix, as suggested by the Examiner, but any such modification would not provide the spectral transmittance characteristic of Fig. 10.34 of Bahadur, as a result of such modification. Furthermore, the disclosure in Bahadur in relation to Fig. 10.34

is directed to a double layer super twist display D-STN rather than a single layer STN display."

As noted above, each of the independent claims of this application recite the feature of an active matrix type liquid crystal panel, and for the reasons given above, as set forth in the accompanying Declaration, applicants submit that it cannot be considered obvious in the sense of 35 USC 103 to modify Bahadur in the manner suggested by the Examiner, and such modification would not provide the claimed features concerning spectral transmission characteristic and a variation of the drive voltage applied at all voltages of the drive voltage from a dark state to a light state or in the range of a minimum voltage required for a visual display on the liquid crystal panel to a maximum voltage. Thus, applicants submit that each of the independent claims and the dependent claims patentably distinguish over Bahadur taken alone or in combination with Matsumoto in the sense of 35 USC 103 and all claims should be considered allowable thereover.


In view of the above amendments and remarks, applicants submit that all claims present in this application should now be in compliance with 35 USC 112, second paragraph, and patentably distinguish over the cited art and should now be in condition for allowance. Accordingly, issuance of an action of a favorable nature is courteously solicited.

To the extent necessary, applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in the fees due in connection with the filing of this paper, including extension of time fees, to the deposit account of Antonelli,

Terry, Stout & Kraus, LLP, Deposit Account No. 01-2135 (Case: 503.34972CX2),
and please credit any excess fees to such deposit account.

Respectfully submitted,

ANTONELLI, TERRY, STOUT & KRAUS, LLP



Melvin Kraus
Registration No. 22,466

MK/jla
(703) 312-6600